LIST OF CONTENTS

JANUARY

Special Honour Issue

Editorial	VII	
Introduction	IX	
Anniversary Greetings	XI	
Mary R. Masson	1	Robert Alexander Chalmers
Robert A. Chalmers	7	The analysis of a paper on analytical chemistry
Jiří Lexa and Karel Štulík	11	Determination of bismuth by electrochemical stripping analysis. Elimination of interferences by using a mercury film electrode modified with tri-n-octylphosphine oxide, and application to copper alloys
G. Scharf and J. D. Winefordner	17	Phosphorescence characteristics of acetophenone, benzophenone, *p*-aminobenzophenone and Michler's ketone in various environments
Marta Andino, J. J. Aaron and J. D. Winefordner	27	Study of pH and substrate effects on room-temperature phosphorimetry of some indolecarboxylic acids
Elsie M. Donaldson and Mohui Wang	35	Methyl isobutyl ketone extraction of iodide complexes from sulphuric acid–potassium iodide media and back-extraction into an aqueous phase
M. D. Luque de Castro	45	Speciation studies by flow-injection analysis
Julian F. Tyson	51	Analytical applications of absorption spectroelectrochemistry at grazing incidence
E. J. Ekanem, C. L. R. Barnard, J. M. Ottaway and G. S. Fell	55	Matrix modification—the use of protein-free solutions in the determination of metals in blood by flame atomic fluorescence and emission spectrometry
Jose Alvarado, Francisco Campos and John M. Ottaway	61	Determination of trace levels of calcium in steels by carbon-furnace atomic-absorption and atomic-emission spectrometry
Anil C. Mehta	67	Sample pretreatment in the trace determination of drugs in biological fluids
Silve Kallmann	75	Analysis of sweeps. The cuprous sulphide collecting system
F. Pellerin, C. Majcherczyk et D. Baylocq	85	Etude analytique du Goodrite 3114, antioxydant des polyoléfines. Comportement vis à vis des agents de stérilisation
Chow Chong	91	Determination of silver, bismuth, cadmium, copper, iron, nickel and zinc in lead- and tin-base solders and white-metal bearing alloys by atomic-absorption spectrophotometry
Short Communications		
Bishop B. Sithole and Robert D. Guy	95	Separation of nitroimidazoles by reversed-phase high-pressure liquid chromatography
Liu Zaiyou and Wu Limin	98	Determination of total phosphorus in water by photochemical decomposition with ultraviolet irradiation
Mariana S. Ionescu, Veronica Badea, G. E. Baiulescu and V. V. Coşofreţ	101	Nafronyl ion-selective membrane electrodes and their use in pharmaceutical analysis
Analytical Data		
Gustavo González, Daniel Rosales, José L. Gómez Ariza and Alfonso Guiraúm Pérez	105	Correction factors for the glass electrode in aqueous *N*,*N*-dimethylformamide solutions

FEBRUARY

Talanta Advisory Board III

F. T. M. Dohmen and P. C. Thijssen 107 A FORTH package for computer-controlled flow-injection analysis

N. A. Zakhari, M. Rizk, F. Ibrahim and M. I. Walash 111 Determination of phenothiazines by charge-transfer complex formation with chloranilic acid

Shigeya Sato and Sumio Uchikawa 115 Extraction and spectrophotometric determination of titanium(IV) with Malachite Green and *p*-chloromandelic acid, with application to mild steels

Anjum S. Khan and Frederick F. Cantwell 119 Measurement of acidity constants of benzothiadiazines by solvent extraction with use of a membrane phase-separator

Eita Kinoshita, Folke Ingman, Gunnar Edwall, Sigvard Thulin and Stanisław Głąb 125 Polycrystalline and monocrystalline antimony, iridium and palladium as electrode material for pH-sensing electrodes

M. Hernández Cordoba, P. Viñas and C. Sańchez-Pedreño 135 Kinetic determination of traces of manganese in different materials by its catalytic effect on the Methylene Green–periodate reaction

G. Rauret, L. Pineda, M. Ventura and R. Compaño 141 Solvent extraction of *N*-cyclohexyl-*N*-nitrosohydroxylamine (cnha) into some organic solvents and of the Cu(II)–cnha complex into methyl isobutyl ketone

Krystyna Brajter and Ewa Dąbek-Złotorzyńska 149 Selective separation of metal ions by use of chelate-forming resins prepared by modification of conventional anion-exchangers with SPADNS and Orange II

Zofia Boguszewska, Maria Krasiejko and Bogna Palmowska-Kuś 155 Application of platinum gauze activated by hydrogen to the adsorption separation of silver traces and their determination by AAS or spectrophotometry

Short Communications

Yukio Sakai and Naoko Mori 161 Preconcentration of cobalt with *N*-(dithiocarboxyl)sarcosine and Amberlite XAD-4 resin

C. S. P. Sastry, T. E. Divakar and U. Viplava Prasad 164 Indirect spectrophotometric methods for the determination of antibiotics with iodine or periodate, and metol and sulphanilamide

Toshiaki Hattori and Hitoshi Yoshida 167 Thermometric titration of the dodecyl sulphate ion with metal–phenanthroline complexes

F. Belal, M. Rizk, F. Ibrahiem and M. Sharaf El-Din 170 Spectrophotometric determination of benzothiadiazines in dosage forms

U. M. Abbasi, Fateh Chand, M. I. Bhanger and S. A. Memon 173 A rapid method for the determination of some antihypertensive and antipyretic drugs by thermometric titrimetry

R. K. Gilpin and M. E. Gangoda 176 Nuclear magnetic resonance spectrometry of chemically and physically altered porous silica surfaces under gas chromatographic conditions

Abdel-Aziz M. Wahbi, Mohammad A. Abounassif and E. A. Gad-Kariem 179 Colorimetric determination of piperazine with *p*-benzoquinone

A. S. Khan and A. Chow 182 Sorption of silver, gold and palladium with a polythioether foam

M. S. Mahrous, M. Abdel Salam, A. S. Issa and M. Abdel-Hamid 185 Use of *p*-chloranilic acid for the colorimetric determination of some antimalarials

Andrzej Darkowski and Michael Cocivera 187 Simultaneous polarographic determination of cadmium and tellurium in electro-deposited cadmium telluride thin films

Analytical Data

Hiroaki Kawano, Yoshikazu Nakai, Toshio Matsuda and Toyoshi Nagai 191 Adsorption of univalent and bivalent metal nitrates on hydrous lead dioxide. Adsorption behaviour of potassium, cupric, zinc, cadmium and nitrate ions

Annotation

A. G. Asuero, M. J. Navas and J. L. Jimenez-Trillo 195 Spectrophotometric methods for the evaluation of acidity constants—I. Numerical methods for single equilibria

Papers Received i

Publications Received iii

Notices iv

Notes for Authors v

Questionnaire: Software Survey Section vii

MARCH

J. Ruz, A. Ríos, M. D. Luque de Castro and M. Valcárcel 199 Flow-injection analysis with multidetection as a useful technique for metal speciation

Katsuyuki Fujita and Takeo Takada 203 Effect of temperature on generation and decomposition of the group Vb element hydrides and estimation of the kinetic stability of gaseous bismuth hydride by atomic-absorption spectrometry

M. Garcia-Vargas, S. Trevilla and M. Milla 209 Synthesis and characterization of 1,2-cyclohexanedione bis-benzoylhydrazone and its application to the determination of Ti in minerals and rocks

Joëlle Fidanza and Jean-Jacques Aaron 215 Evaluation of filter papers as substrates for solid-surface room-temperature fluorimetry and photochemical fluorimetry

R. Caletka, R. Hausbeck and V. Krivan 219 The distribution of elements between polyether-type polyurethane foam, cyclic polyethers and hydrofluoric acid solution

M. Tsezos and S. Mattar 225 A further insight into the mechanism of biosorption of metals, by examining chitin EPR spectra

Elsie M. Donaldson and Mohui Wang 233 Determination of silver, antimony, bismuth, copper, cadmium and indium in ores, concentrates and related materials by atomic-absorption spectrophotometry after methyl isobutyl ketone extraction as iodides

Clinio Locatelli, Francesco Fagioli, Corrado Bighi and Tibor Garai 243 Trace-metal determination by second-harmonic alternating-current anodic stripping voltammetry

Jean Pettersson, Lena Hansson and Åke Olin 249 Comparison of four digestion methods for the determination of selenium in bovine liver by hydride generation and atomic-absorption spectrometry in a flow system

M. E. Díaz García and A. Sanz-Medel 255 Dye–surfactant interactions: a review

Lauri H. J. Lajunen and Aaro Kubin 265 Determination of trace amounts of molybdenum in plant tissue by solvent extraction–atomic-absorption and direct-current plasma emission spectrometry

Short Communications

J. D. Ingle, Jr 271 Simple sample-cell positioner for reducing the imprecision due to placement of test-tube type sample cells

Kenichiro Nakashima, Shoko Tomiyoshi, Shin'ichi Nakatsuji and Shuzo Akiyama 274 Development and application of organic reagents for analysis—VII. Extraction and fluorimetric determination of perchlorate ions with 2,6-di-*p*-tolyl-4-phenylpyrylium chloride

N. K. Roy and A. K. Das 277 Determination of tungsten in rocks and minerals by chelate extraction and atomic-absorption spectrometry

E. Cardarelli, M. Cifani, M. Mecozzi and G. Sechi 279 Analytical application of emulsions. Determination of lead in gasoline by atomic-absorption spectrophotometry

Yuji Kawabata, Totaro Imasaka and Nobuhiko Ishibashi 281 Ultramicro flow-cell for semiconductor laser fluorimetry

Analytical Data

Rita Delgado, J. J. R. Fraústo da Silva and M. Cândida T. A. Vaz 285 Copper(II) complexes of cyclic tetra-azatetra-acetic acids—unusual features and possible analytical applications

Y. Akama, H. Yokota, K. Sato and T. Nakai 288 Studies on extraction of manganese(II) with 1-phenyl-3-methyl-4-acyl-5-pyrazolone

Papers Received i

Publications Received iii

Notices iv

Software Survey Section v Haltafall; Polarog; Miniterm; Gran; Diagrams; Buffer; Simplex; Valpot; CAPU1-1, CAPU1-2, CAPU1-3, CAPU2-1

APRIL

Obituaries III

Nicolas L. Duchateau, A. Verbruggen, F. Hendrickx and P. De Bièvre 291 Rapid accurate isotopic measurements on boron in boric acid and boron carbide

A. P. Gamot, G. Vergoten, M. Saudemon, G. Fleury et J. Barbillat 295 Microspectrométrie Raman multicanale: application à l'identification du triméthylacétate et du caproate de fluocortolone isolés d'une forme galenique

G. Merlot, B. Lacroix, M. T. Romon, J. P. Huvenne et G. Fleury 299 Analyse de mélanges complexes sur le couplage chromatographie en phase gazeuse/spectrométrie infrarouge par transformée de Fourier équipe de colonnes capillaires

George Norwitz and Peter N. Keliher 311 Continued investigation of the diazotization and coupling spectrophotometric technique for the determination of aromatic amines with 8-amino-1-hydroxynaphthalene-3,6-disulphonic acid and *N*-(1-naphthyl)-ethylenediamine as coupling agents

R. Caletka, R. Hausbeck and V. Krivan 315 Extraction of Mo, W and Tc with polyurethane foam and with cyclic polyether from SCN^-/HCl medium

Joseph Wang and Javad M. Zadeii 321 Trace determination of yttrium and some heavy rare-earths by adsorptive stripping voltammetry

Aldo Laganà, Mauro Rotatori, Giuliana Vinci, M. Perla Colombini and Roberta Curini 325 Sample-pretreatment procedure for routine liquid chromatographic assay of serum cortisol

J. Medinilla, F. Ales and F. García Sánchez 329 Spectrophotometric and second-derivative spectrophotometric determination of mercury in organomercurials by means of benzyl 2-pyridyl ketone 2-quinolylhydrazone

A. Corsini and O. Herrmann 335 Aggregation of *meso*-tetra-(*p*-sulphonatophenyl)porphine and its Cu(II) and Zn(II) complexes in aqueous solution

S. Kiciak and H. Gontarz 341 Simultaneous spectrophotometric determination of *o*-Cresol Red, Semi-Xylenol Orange and Xylenol Orange

Short Communications

J. B. McHugh 349 Determining gold in water by anion-exchange batch extraction

Jayarama, M. Violet D'Souza, H. S. Yathirajan and Rangaswamy 352 Interaction of phenothiazines with nitroso-R salt and extractive spectrophotometric determination of phenothiazine drugs

Samuel J. Lyle and Nidal A. Za'tar 355 An exploratory study of the indirect fluorimetric determination of uranium(VI) by energy transfer and measurement of fluorescent emission by europium(III)

Samaresh Banerjee 358 A new method for the atomic-absorption determination of lead blended as lead alkyls in motor spirit

Samaresh Banerjee 360 Spectrophotometric determination of titanium with tannin and thioglycollic acid and its application to titanium-treated steels and ferrous and non-ferrous alloys

F. İnci Şengün and Köksal Ulaş 363 Analytical investigations on cephalosporins—I. Spectrophotometric determination of ceftriaxone

F. İnci Şengün and İnci Fedai 366 Analytical investigations on cephalosporins—IV. Application of Ellman's reagent

Analytical Data

Walenty Szczepaniak and Maria Ren 371 Use of a bismuth ion-selective electrode for investigation of bismuth complexes of citric and malic acids

Papers Received i

Publications Received iii

Notices v

Questionnaire: Software Survey Section vii

MAY

M. Villarreal, L. Porta, E. Marchevsky and R. Olsina	375	Spectrophotometric determination of cadmium with 2-(5-chloro-2-pyridylazo)-5-dimethylaminophenol
Anna Maria Ghe, Giuseppe Chiavari and Joanis Evgenidis	379	Photometric and electrochemical detection of purine and pyrimidine compounds in reversed-phase and ion-exchange high-pressure liquid chromatography
A. Boughriet, M. Wartel et J. C. Fischer	385	Comportement électrochimique du tétraoxyde de diazote dans le sulfolane
Hideko Koshima and Hiroshi Onishi	391	Adsorption of metal ions on activated carbon from aqueous solutions at pH 1–13
Joseph Wang, Den Bai Luo and Bassam Freiha	397	Evaluation and improvement of the resolution of voltammetric measurements
A. D'Ulivo, R. Fuoco and P. Papoff	401	Behaviour of some dialkyl- and trialkyl-lead compounds in the hydride-generation procedure using a non-dispersive atomic-fluorescence detector
Yukio Sakai, Naoko Kawano, Hiroshi Nakamura and Makoto Takagi	407	Extraction and photometric determination of lead with diazacrown ether dye
I. López García, J. Martínez Aviles and M. Hernández Córdoba	411	Determination of palladium with thiocyanate and Rhodamine B by a solvent-extraction method
Tadao Sakai and Noriko Ohno	415	Simultaneous two- and three-component determinations in multicomponent mixtures by extraction-spectrophotometry and thermochromism of ion-association complexes
Roman E. Sioda, Graeme E. Batley, Walter Lund, Joseph Wang and Steven C. Leach	421	Electrolytic preconcentration in instrumental analysis
F. B. Sherman, B. M. Katz and G. N. Evenko	429	Aquametric microdetermination of hydration of ion-exchange resins
Josef Havel and Milan Meloun	435	Multiparametric curve fitting—IX. Simultaneous regression estimation of stoichiometry and stability constants of complexes

Short Communications

Ouyang Zheng, Xu Pei-Yi, Xiong Guan-Lan and Liu Yue	443	A new reagent for determining trace selenium by gas chromatography: 1,4-dibromo-2,3-diaminonaphthalene
Frances Flavelle and Alan D. Westland	445	The determination of samarium, europium, gadolinium and dysprosium in uranium products by direct-current plasma emission spectrometry
F. Belal and J. L. Anderson	448	Flow injection determination of ergonovine maleate with amperometric detection at the Kel-F–graphite composite electrode
Kazufumi Takayanagi and George T. F. Wong	451	The oxidation of iodide to iodate for the polarographic determination of total iodine in natural waters
Hsu Zhang-Fa, Jia Xi-Pin and Hu Chao-Sheng	455	Simultaneous determination of light rare earths in monazite sand by densitometry on thin-layer chromatograms
Jose Aznárez, Jose M. Rabadan, Angel Ferrer and Pilar Cipres	458	Atomic-absorption spectrophotometric determination of tin by hydride generation in non-aqueous medium after extraction

Analytical Data

G. Poulias, N. Papadopoulos and D. Jannakoudakis	461	Dissociation of 5-fluoro- and 3,5-dinitrosalicylic acids in water–methanol mixtures at 25°
A. Izquierdo, R. Compañó and E. Bars	463	Solvent extraction of zinc with 5,7-dichloro-2-methyl-8-hydroxyquinoline into chloroform
Papers Received	i	
Publications Received	ii	
Questionnaire: Software Survey Section	v	

JUNE

Louis Gordon Memorial Award	III	
N. Zimová, I. Němec and J. Zima	467	Determination of chlorpromazine and thioridazine by differential pulse voltammetry in acetonitrile medium
Antonio Braibanti, Claudio Bruschi, Emilia Fisicaro and Marzia Pasquali	471	Analysis of variance in determinations of equivalence volume and of the ionic product of water in potentiometric titrations
C. H.-Siegfried, W. Weinert, Franz W. E. Strelow and Reinhard G. Böhmer	481	The influence of thiourea on the cation-exchange behaviour of various elements in dilute nitric and hydrochloric acids
Kurt Kalcher	489	A new method for the voltammetric determination of nitrite
Paul R. Klock and Paul J. Lamothe	495	Determination of ammonium in a buddingtonite sample by ion-chromatography
Robert Fournaise et Christian Petitfaux	499	Etude de la formation des complexes en solution aqueuse—I. Méthode protométrique informatisée de détermination des concentrations des ions libres en solution (méthode CILS) et d'estimation des constantes de stabilité des complexes: choix critique des modalités d'application à partir d'un exemple simulé
Milan Meloun, Milan Javůrek and Josef Havel	513	Multiparametric curve fitting—X. A structural classification of programs for analysing multicomponent spectra and their use in equilibrium-model determination
Josef Havel and Milan Meloun	525	Multiparametric curve fitting—XI. POLET computer program for estimation of formation constants and stoichiometric indices from normalized potentiometric data
A. G. Asuero, J. L. Jimenez-Trillo and M. J. Navas	531	Spectrophotometric methods for the evaluation of acidity constants—II. Numerical methods for two-step overlapping equilibria
Short Communications		
F. Hernández Hernández, J. Medina Escriche and M. T. Gasco Andreu	537	Enhancement of the fluorescence of the zinc–morin complex by a non-ionic surfactant
J. M. Mir and C. Martinez	541	Fluorimetric determination of boron at microgram level
Sarala Raoot and K. N. Raoot	544	Selective complexometric determination of palladium with thiosulphate as masking agent
T. D. Yerian, T. P. Hadjiioannou and G. D. Christian	547	Flow-injection analysis with the iron-induced perbromate–iodide reaction: spectrophotometric determination of iron
Doddaballapur K. Padma	550	A gravimetric procedure for the determination of wet precipitated sulphur, dissolved sulphur, soluble sulphides and hydrogen sulphide
Papers Received	i	
Questionnaire: Software Survey Section	iii	

JULY

The Ronald Belcher Memorial Award	III	
D. R. Crow	553	Diffusion coefficients and complex equilibria in solution—V. Limitations to the validity of the diffusion equations
R. S. Young	561	The analysis of ferroalloys
M. C. Gutiérrez, A. Gomez-Hens and M. Valcárcel	567	Selective kinetic fluorimetric determination of copper at the ng/ml level
Jouko J. Kankare and Roger Stephens	571	The influence of optical design on the signal to noise characteristics of polarimeters
Etsuro Iwamoto, Chan-Huan Chung, Manabu Yamamoto and Yuroku Yamamoto	577	Arsenic determination with graphite-cloth ribbon in graphite-furnace atomic-absorption spectrometry

M. Bos 583 Kalman filtering for the evaluation of the current–time function in d.c. polarography

R. López Núñez, M. Callejón Mochón and A. Guiraúm Pérez 587 Extraction and spectrophotometric determination of titanium(IV) with alizarin and fluoride

I. T. Urasa and A. M. O'Reilly 593 The application of direct current plasma spectrometry to the study of the fractionation of iron and phosphorus in surface waters

J. G. Crock, F. E. Lichte, G. O. Riddle and C. L. Beech 601 Separation and preconcentration of the rare-earth elements and yttrium from geological materials by ion-exchange and sequential acid elution

Daniel Rosales, Isabel Millán and José L. Gómez Ariza 607 Spectrophotometric determination of indium in nickel alloys and zinc ores with 1-(2-pyridylmethylideneamine)-3-(salicylideneamine)thiourea

Short Communications

Sadanobu Inoue, Suwaru Hoshi and Mutsuya Matsubara 611 Extraction–spectrophotometric determination of vanadium with *N*-*m*-tolyl-*N*-phenylhydroxylamine and its application to coal and coal fly-ash

Toshio Matsuda and Toyoshi Nagai 614 Degradation of nitrilotriacetic acid (NTA) by oxidation with lead dioxide suspension

A. Varada Reddy and Y. Krishna Reddy 617 Sequential extraction and determination of copper and nickel with 2,4-dihydroxyacetophenone thiosemicarbazone

M. C. Gennaro, E. Mentasti and C. Sarzanini 620 Binding properties of aminopolycarboxylato ligands bound to cellulose

Zaofan Zhao, Xiaohua Cai, Peibiao Li and Handong Yang 623 Polarographic determination of trace amounts of thorium

Analytical Data

M. Callejón Mochón, M. Centeno Gallego and A. Guiráum Pérez 627 Salicylaldehyde-1-phthalazinohydrazone as an analytical reagent

J. E. Kountourellis, F. A. Underwood, P. P. Georgakopoulos and A. Raptouli 631 X-ray diffraction data for six analgesics

Papers Received i

Publications Received iii

Notice v

Questionnaire: Software Survey Section vii

AUGUST

S. Rubio, A. Gómez-Hens and M. Valcárcel 633 Analytical applications of synchronous fluorescence spectroscopy

Krzysztof Ren and Anna Ren-Kurc 641 A new numerical method of finding potentiometric titration end-points by use of rational spline functions

P. Damiani and G. Burini 649 Fluorometric determination of nitrite

Teresa L. Keimig and Linda B. McGown 653 Micellar modification of the spectral, intensity and lifetime characteristics of the fluorescence of fluorescein-labelled phenobarbital

Thomas M. Schmitt, Robert J. Ziegler, Ead S. Muzher, Robert J. Doyle and James L. Freers 657 Analysis of anthranilic acid by liquid chromatography

W. F. Pickering 661 The effect of hydrolysed aluminium species in fluoride ion determinations

Tsutomu Matsuo, Yoshitaka Masuda and Eiichi Sekido 665 Acid–base and chelatometric photo-titrations with photosensors and membrane photosensors

Barry Chiswell and Mazlin B. Mokhtar — 669 The speciation of manganese in freshwaters

Saad S. M. Hassan and M. M. Elsaied — 679 A new liquid-membrane electrode for selective determination of perchlorate

Short Communications

J. Martínez Calatayud and Campins Falco — 685 Determination of levamisole hydrochloride with HgI_4^{2-} by a turbidimetric method and flow-injection analysis

Zuzana Tocksteinová and František Opekar — 688 The electrochemical generation of small amounts of hydrogen cyanide

Minoru Hosoya, Kōichi Tozawa and Kunio Takada — 691 Rapid technique for distillation of methyl borate for ICP atomic-emission spectrometric determination of boron in steel

Wen-bin Qi and Li-zhong Zhu — 694 Spectrophotometric determination of chromium in waste water and soil

M. C. García Alvarez-Coque, R. M. Villanueva Camañas, M. C. Martínez Vayá, G. Ramis Ramos and C. Mongay Fernández — 697 Spectrophotometric determination of mercury(II) and silver(I) with copper(II) and diethyldithiocarbamate in the presence of Triton X-100

Colin D. Chriswell, Richard G. Richardson and Richard Markuszewski — 700 Spectrophotometric determination of iron in process samples from the chemical cleaning of coal

B. C. Verma, S. Chauhan, Neelam Sharma, Usha Sharma, D. K. Sharma and Anila Sood — 703 Analytical applications of the amine–carbon disulphide reaction in acetonitrile

Annotation

Ragnar Bye — 705 Interferences from bivalent cations in the determination of selenium by hydride-generation and atomic-absorption spectrometry. A discussion of the claim that the metal ions are reduced to the metallic state by sodium borohydride

Papers Received — i

Publications Received — ii

Questionnaire: Software Survey Section — iii

SEPTEMBER

The Louis Gordon Memorial Award — III

Joseph Wang, Peng Tuzhi, Meng-Shan Lin and Tim Tapia — 707 Trace measurements of the antineoplastic agent methotrexate by adsorptive stripping voltammetry

James A. Cox, Atul Bhatnagar and Robert W. Francis Jr. — 713 Evaluation of coupled transport across a liquid membrane as an analytical preconcentration technique

Suresh K. Srivastava, Satish Kumar, Chakresh K. Jain and Surender Kumar — 717 Studies with an inorganic ion-exchange membrane exhibiting selectivity for Pb(II) ions

Elisabeth Suet et André Laouénan — 721 Etude de l'interaction ion-ammonium tétramines cycliques par potentiométrie et RMN à l'aide du programme MICMAC

Shoji Motomizu, Hiroshi Mikasa and Kyoji Tôei — 729 Fluorometric determination of nitrite in natural waters with 3-aminonaphthalene-1,5-disulphonic acid by flow-injection analysis

J. M. Kauffmann, G. J. Patriarche, M. Chateau-Gosselin et B. Gallo Hermosa — 733 Oxydation électrochimique de la khelline et de l'amikhelline: étude par voltammétrie cyclique

Andrzej Lewenstam, Ari Ivaska and Erkki Wänninen — 739 Single-point titration of metal ions and ligands by measuring change in pH

Short Communications

Salwa Rizk El-Shabouri 743 Spectrophotometric determination of nitrazepam in tablets

P. Yañez-Sedeño and L. M. Polo Diez 745 Spectrophotometric determination of Paraquat with BiI_4^- in the presence of gum arabic

J. Alary, J. Vandaele, C. Escrieut and R. Haran 748 Determination of trace amounts of nickel by atomic-absorption spectrometry after carbonyl generation

Ismail M. Al-Daher and Byron Kratochvil 751 Effect of temperature on the determination of aromatic nitro-compounds by coulometrically generated chromium(II)

Kohji Hayase, Kiminori Shitashima and Hiroyuki Tsubota 754 Determination of organically-associated trace metals in estuarine seawater by solvent extraction and atomic-absorption spectrometry

J. V. Gimeno Adelantado and F. Bosch Reig 757 Mineralization of some organic sulphur compounds by fusion with molten alkali

Giovanna Bertocchi 760 Determination of optical purity in partially racemized samples of L-aspartic acid by means of liquid crystals

Analytical Data

Santi Capone, Alessandro De Robertis, Concetta De Stefano and Silvio Sammartano 763 Formation and stability of zinc(II) and cadmium(II) citrate complexes in aqueous solution at various temperatures

Joseph R. Siefker and Rodolfo V. Aroc 768 Stability constants and molar absorptivities for complexes of copper(II) with *N*-methyldiethanolamine, 1,4-bis(2-hydroxypropyl)-2-methylpiperazine and 2-amino-2-methyl-1-propanol

Wiesława Zaborska and Maciej Leszko 769 The extraction of Zn(II), Cd(II) and Pb(II) from hydrochloric acid media by Amberlite LA-2 hydrochloride dissolved in 1,2-dichloroethane

Annotation

Tong Shen-yang and Li Ke-an 775 The distribution of chromium(VI) species in solution as a function of pH and concentration

Papers Received i

Publications Received ii

Erratum iii

Notice iv

Notes for Authors v

Questionnaire vii

OCTOBER

Talanta Medal III

A. M. Afonso, J. J. Santana and F. García Montelongo 779 Kinetic spectrofluorimetric determination of silver, based on its catalytic effect on the oxidation of pyrocatechol-1-aldehyde 2-pyridylhydrazone by peroxodisulphate in the presence of 1,10-phenanthroline as activator

F. García Sánchez and M. Hernández López 785 Trace zinc determination by synchronous derivative fluorimetry

Aytekin Temizer 791 Electroanalytical determination of vinca alkaloids used in cancer chemotherapy

Jaakko Leppinen and Susanna Vahtila 795 Differential pulse polarographic determination of thiol flotation collectors and sulphide in waters

Ari Ivaska and Jaakko Leppinen 801 Determination of trace amounts of the flotation collectors ethyl xanthate and diethyl dithiophosphate in aqueous solutions by cathodic stripping voltammetry

Kevin J. West and Ronald T. Pflaum 807 Spectrophotometric and spectrofluorometric determination of zinc and cadmium with 2,2′-pyridil bis(2-quinolylhydrazone)

Jiří Barek, Antonín Berka, Zuzana Tocksteinová and Jiří Zima 811 Voltammetric determination of benzidine and its derivatives, at a glassy-carbon electrode

Małgorzata Ciszkowska and Zbigniew Stojek 817 Determination of traces of EDTA, EGTA and DCTA by adsorptive accumulation of their complexes with Hg(II) followed by cathodic stripping

Milan Meloun, Milan Javůrek and Alena Hynková 825 Multiparametric curve fitting—XII. Resolution capability of two programs for analysing multicomponent spectra, SQUAD(84) and PSEQUAD(83)

Short Communications

Corrado Sarzanini, Edoardo Mentasti, Maria Carla Gennaro, Valerio Porta and Paolo Volpe 835 Preconcentration and determination of ultratraces of lead and bismuth

Zhang Xiao-song, Zhu Xiang-ping and Lin Chang-shan 838 Determination of molybdenum, chromium and vanadium by ion-pair high-pressure liquid chromatography based on precolumn chelation with 4-(2-pyridylazo)resorcinol

Analytical Data

Irena Němcová, Borek Metal and Jaroslav Podlaha 841 Dissociation constants of arsenazo III

M. Esteban, E. Casassas and L. Fernandez 843 Formation constants of some mercury(II) complexes determined from their anodic polarographic signals

F. García Sánchez, C. Cruces Blanco and J. Medinilla 847 Fluorimetric and absorptiometric determination of dissociation constants and chromogenic reactions of benzyl 2-pyridyl ketone 2-quinolylhydrazone

Annotation

Tadeusz Hofman and Małgorzata Krzyżanowska 851 Determination of stability constants of complexes from the titration curve by the maximum likelihood principle

Papers Received i

Notices iii

Questionnaire: Software Survey Section v

NOVEMBER

Minoru Hara and Noboru Nomura 857 Application of modified normal pulse polarography and its differential mode to alkaline-earth metal ions in acid solutions

Kunio Shiraishi, Gi-ichiro Tanaka and Hisao Kawamura 861 Simultaneous multielement analysis of various human tissues by inductively-coupled plasma atomic-emission spectrometry

Otto S. Wolfbeis, Bernhard P. H. Schaffar and R. A. Chalmers 867 Fibre-optic titrations—IV. Direct complexometric titration of aluminium(III) with DCTA

R. von Wandruszka and J. D. Winefordner 871 Fluorescence in thin liquid films

Jaroslav P. Matousek, Brian J. Orr and Mark Selby 875 Spectrometric analysis of non-metals introduced from a graphite furnace into a microwave-induced plasma

Boy Høyer and Lars Kryger 883 Evaluation of single-point calibration in flow potentiometric stripping analysis

P. Linares, M. D. Luque de Castro and M. Valcárcel 889 Fluorimetric differential-kinetic determination of silicate and phosphate in waters by flow-injection analysis

Surasak Watanesk and A. A. Schilt 895 Separation of some transition-metal ions on silica-immobilized 2-pyridinecarboxaldehyde phenylhydrazone

Harvey Diehl, Naomi Horchak-Morris, Alta J. Hefley, Linda F. Munson and Richard Markuszewski 901 Studies on fluorescein—III. The acid strengths of fluorescein as shown by potentiometric titration

M. Sarbar, S. M. Golabi et M. H. Pournaghi-Azar 907 Mise en évidence de deux nouveaux indicateurs acide–base dans l'acide acétique anhydre

Short Communications

James A. Cox and Krishnaji R. Kulkarni 911 Comparison of inorganic films and poly(4-vinylpyridine) coatings as electrode modifiers for flow-injection systems

J. Peinado, F. Toribio and D. Pérez-Bendito 914 Kinetic fluorimetric determination of organic peroxides and lipohydroperoxides at the nanomole level

Lisa D. Detter, Steven J. Pachuta, R. G. Cooks and R. A. Walton 917 Effects of vacuum on tetrakis-isocyanide complexes of silver(I) and copper(I): implications for SIMS analyses

Analytical Data

M. Teresa S. D. Vasconcelos and Adelio A. S. C. Machado 919 Simultaneous determination of the acid and basic ionization constants of imidazole

F. Salinas, A. Muñoz de la Peña and J. A. Murillo 923 Phototautomerism in the lowest excited singlet state of 1-hydroxy-2-carboxyanthraquinone

R. McMahon, M. Brennan and J. D. Glennon 927 The pK_a values of *N*,*N*,*N*′,*N*′-tetrakis-(2-hydroxypropyl)ethylenediamine

Annotations

A. G. Asuero, J. L. Jimenez-Trillo and M. J. Navas 929 Mathematical treatment of absorbance versus pH graphs of polybasic acids

Harvey Diehl 935 Studies on fluorescein—IV. Notes on obtaining acid dissociation constants from the titration curves of dibasic acids

Papers Received i

Questionnaire: Software Survey Section iii

DECEMBER

Obituary III

Chang Yun Po and Zhou Nan 939 Rapid spectrophotometric determination of palladium in titanium alloys with 2-(5-bromo-2-pyridylazo)-5-(diethylamino)phenol

Harald Gampp, Marcel Maeder, Charles J. Meyer and Andreas D. Zuberbühler 943 Calculation of equilibrium constants from multiwavelength spectroscopic data—IV. Model-free least-squares refinement by use of evolving factor analysis

M. L. Tuttle, M. B. Goldhaber and D. L. Williamson 953 An analytical scheme for determining forms of sulphur in oil shales and associated rocks

José A. S. Cavaleiro and Kevin M. Smith 963 Chromatography of chlorophylls and bacteriochlorophylls

T. Pal, A. Ganguly, D. S. Maity and Stanley E. Livingstone 973 *N*,*N*′-Diphenyldithiomalonamide as a gravimetric reagent for nickel and cobalt

Giuseppe Chiavari, Luciana Pastorelli and Georgios Perrakis 979 Preparation, mesomorphic properties and behaviour of 4,4′-biphenylene-dibenzoates as stationary phases in gas chromatography

C. Majcherczyk, P. Polge, D. Baylocq et F. Pellerin 985 Action des rayonnements beta et des oxydants sur le di-tert.butyl-3,5 hydroxy-4 toluène

L. Almestrand, D. Jagner and L. Renman 991 Determination of cadmium, lead and copper in milk and milk powder by means of flow potentiometric stripping analysis

M. F. Vergnes et J. Alary 997 Dosage des xanthiques naturels par CLHP. Comparaison des méthodes et applications

W. B. Emary, I. Isern-Flecha, K. V. Wood, T. Y. Ridley and R. G. Cooks 1001 Desorption ionization/tandem mass spectrometry with a caesium ion source and a triple quadrupole mass spectrometer

Krishna K. Verma, Pramila Tyagi and Mary Grace Pushpa Ekka 1009 Determination of chromate and cyanide by anion-exchange with lead iodate, and the analysis of mixtures of cyanide, thiocyanate and halides

Vijay S. Tripathi	1015	An algorithm and a FORTRAN program (CHEMEQUIL-2) for calculation of complex equilibria
A. Arrebola Ramírez, C. Jiménez Linares, F. Alés Barrero and M. Román Ceba	1021	Study of the mixed-metal lanthanum–magnesium–purpurin complex: spectrophotometric determination of yttrium and lanthanides
Short Communication		
Barbara Różańska and Elwira Lachowicz	1027	Tetrabutylammonium bromide/thenoyltrifluoroacetone/MIBK extraction for AAS determination of cobalt, nickel, and manganese in copper ores and concentrates
Analytical Data		
F. Arce, C. Blanco and J. Casado	1031	Polarographic studies of mixed hydroxy-complexes of monoethanolamine with cadmium and with lead
Annotation		
D. Baylocq, C. Majcherczyk et F. Pellerin	1035	Action de l'acide citrique sur l'anhydride acétique et la pyridine. Determination du mecanisme réactionnel et de la structure du composé forme
Preliminary Communication		
Harvey W. Yurow	1039	Novel fluorescence reaction for malononitrile
Papers Received	i	
Publications Received	ii	
Questionnaire: Software Survey Section	iii	